MATERIAL SAFETY DATA SHEET CS85*CLEANING SOLUTION/TF SOLUTION/ KEYBOARD CLEANER/CLEANING SOLUTION/ READERKLEEN

SECTION I

GENERAL INFORMATION

July 1993

Distributor's name and address:

PerfectData Corporation 110 West Easy Street Simi Valley, California 93065-1689

PRODUCT NAME

CS85* CLEANING SOLUTION/TF SOLUTION/ KEYBOARD CLEANER/CLEANING SOLUTION/

READERKLEEN

EMERGENCY CONTACT:

CHEMTREC (800) 424-9300

CHEMICAL NAME:

ISOPROPYL ALCOHOL (Isopropanol)

HAZARD RATING:

HEALTH: 2 FIRE: 3 REACTIVITY: 0 SPECIAL: None

SECTION II

HAZARDOUS INGREDIENTS

COMPONENT

CAS NO.

% OSHA ACGIH PEL TLV LIMIT OTHER

HAZARD

ISOPROPYL

67-63-0

PEL TLV >99 400

LIMIT 400

500

-127

100

FLAMMABLE (ACGIH STEL)

SECTION III

· PHYSICAL PROPERTIES

BOILING POINT (Deg F):

181

MELTING POINT (Deg F):

SPECIFIC GRAVITY (Water=1): 0.79 APPEARANCE:

Clear colorless liquid

ODOR: Medicinal alcoholic

WATER SOLUBILITY %:

EVAPORATION RATE (Butyl Acetate=1):

WAPOR DENSITY (Air =1):

2.07

VAPOR PRESSURE, MM H G/20 Deg C:

33

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SECTION IV

FIRE AND EXPLOSION INFORMATION

FLASH POINT (Deg F):

53

METHOD USED:

TCC

FLAMMABLE LIMITS IN AIR %: LOWER: 2 UPPER: 12.7

EXTINGUISHING MEDIA:

Use water spray, dry chemical, CO2, or alcoholic foam. Do not use a direct water

stream.

SPECIAL FIRE FIGHTING

PROCEDURES:

Fire fighters should wear self contained breathing apparatus (SCBA) and full protective clothing. Use water spray to cool nearby containers and structures

exposed to fire.

UNUSUAL FIRE AND

EXPLOSION HAZARDS:

Extinguish all near sources of ignition because vapors may be moved by air

currents to ignition sources distant from the handling point.

SECTION V

HAZARDOUS REACTIVITY

STABILITY: Stable

POLYMERIZATION: Will not occur

CONDITIONS TO AVOID:

Strong oxidizers, aluminum, acetaldehyde, chlorine, ethlene oxide, hydrogen-palladium combination, H2 02-H2 SO4 combination, hypochlorous acid, isocyanates, nitroform, phosgene, oleum, perchloric acid, potassium 5-butoxide, acids, alkalis, amines, halogens, halogen compounds, anhydrides, and aldehydes.

HAZARDOUS DECOMPOSITION

PRODUCTS:

May liberate carbon monoxide or carbon dioxide.

SECTION VI

HEALTH HAZARD INFORMATION

PRIMARY ROUTES OF EXPOSURE:

Skin or eye contact, inhalation, swallowed

SIGNS AND SYMPTOMS OF EXPOSURE:

INHALATION: Vapors and mists irritate the nose and throat. Inhalation of higher concentrations may cause headaches, vomiting, and coma. Inhalation of very high concentrations or prolonged exposure may cause unconsciousness or death.

EYE CONTACT:

Vapors will irritate the eyes. Liquid and mists can severely

irritate or damage the eyes and cause corneal burns.

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SKIN CONTACT: Brief contact may dry the skin, or cause burning or stinging sensation. Prolonged or repeated contact may irritate the skin, causing dermatitis.

SWALLOWED: Swallowing large quantities causes headaches, nausea vomiting stomach cramps and diarreha, and perhaps unconsciousness, or death.

CHRONIC EFFECTS OF EXPOSURE:

Prolonged or repeated exposure to high concentrations can produce severe or fatal CNS depression.

MEDICAL CONDITIONS
GENERALLY AGGRAVATED

BY EXPOSURE:

Persons with pre-existing skin disorders, eye problems, or impaired respiratory function may be more susceptible to the effects for this substance.

SECTION VII PERSONAL PROTECTION

VENTILATION: Local mechanical exhaust ventilation capable of maintaining emissions at the point

of use below the PEL.

RESPIRATORY

PROTECTION: If use conditions generate vapors or mists, wear a NIOSH approved respirator appropriate for those emissions levels. Appropriate respirators may be a full

face piece or a half mask air purifying cartridge respirator equipped for organic vapors/mists, a self-contained breathing apparatus in the pressure demand

mode, or a supplied-air respirator.

EYE PROTECTION: Chemical goggles unless a full face piece respirator is also worn. It is generally

recognized that contact lenses should not be worn when working with chemicals

because contact lenses may contribute to the severity of an eye injury.

PROTECTIVE CLOTHING: Long-sleeved shirt, trousers, safety shoes, rubber gloves and rubber apron.

OTHER PROTECTIVE

MEASURES: An eyewash and safety shower should be nearby and ready for use.

SECTION VIII FIRST AID MEASURES

IF INHALED: Remove to fresh air. Give artificial respiration if not breathing. Get immediate

medical attention.

EYE CONTACT: Immediately flush eyes with lots of running water for 15 minutes. Lifting the

upper and lower eyelids occasionally. Get immediate medical attention.

SKIN CONTACT: Immediately wash skin with lots of soap and water. Remove contaminated

clothing and shoes, wash before reuse. Get medical attention if irritation

persists after washing.

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SECTION IX

SPILL, LEAK AND DISPOSAL PROCEDURES

ACTION TO TAKE - FOR SPILLS AND LEAKS:

SPILLS:

Wear protective equipment including rubber boots, rubber gloves, rubber apron and a self-contained breathing apparatus in the pressure demand mode or a supplied air respirator. If the spill or leak is small, a full face piece air purifying in any event, always wear eye protection. Extinguish all ignition sources and ensure that all handling equipment is electrically grounded. For small spill or drips, mop or wipe up and dispose of in DOT approved waste container. For large spills, contain by diking with soil or other non-combustible absorbent materials and then pump into DOT approved waste container, or absorb with non combustible sorbent material. place residue in DOT approved waste containers. Keep out of sewers, storm drains, surface waters, and soil. Comply with all applicable governmental regulations on spill reporting and handling and disposal of waste.

DISPOSAL METHODS:

Dispose of contaminated product and materials used in cleaning up spills or leaks in a manner approved for this material. Consult appropriate Federal, State and Local regulatory agencies to ascertain proper disposal procedures.

NOTE: Empty containers can have residues, gases and mists and are subject to proper waste disposal, as above.

SECTION X

SPECIAL PRECAUTIONS

HANDLING AND STORAGE PRECAUTIONS:

Keep away from heat, sparks and flames. Store in a cool, dry, well-ventilated place away from incompatible materials. Vent container frequently and more often in warm whether, to relieve pressure. Electrically gound all equipment when handling this product and use only non-sparking tools. Keep container tightly closed when not in use. Do not use pressure to empty container. Wash thoroughly after handling. Do not get in eyes, on skin, or on clothing.

SECTION XI

TOXICITY DATA

ORAL:

Rat LD50 = 5840 Mg/Kg

DERMAL:

Rabbit LD50 = 13 Gm/Kg

INHALATION: Rat LC50 = 16,000 ppm/8 hr

CARCINOGENICITY: This material is not considered to be a carcinogen by the national toxicology

program, the international agency for research on cancer, or the occupational

safety and health administration.

OTHER DATA::

None

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SECTION XII

OTHER REGULATORY INFORMATION

The components of this product are on the TSCA inventory of chemical substances.

Under Massachusetts Right-to-Know Law, hazardous substance and extra ordinarily hazardous substances components present in this product which requires reporting are:

EXTRAORDINARILY HAZARDOUS

SUBSTANCES CHEMICAL

CAS NO.

CONCENTRATION (=> 0.0001%)

ISOPROPANOL

67-63-0

100

Under the Pennsylavania Right-To-Know Law, hazardous substances and special hazardous substances components present in this product which require reporting are

HAZARDOUS CHEMICAL

CAS NO.

CONCENTRATION (=> 1%)

ISOPROPANOL

67-63-0

100

California SCAQMD Rule 443.1 VOC's

VOC: 785 G/L

VAPOR PRESSURE: 33 MMHG @20 Deg C.

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